Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ASTRONOMICAL SOCIETY OF THE PACIFIC

OFFICERS OF THE SOCIETY

E. P. LEWIS.....*President*
W. W. CAMPBELL.....*First Vice-President*
BERNARD BENFIELD.....*Second Vice-President*
A. L. BLACK.....*Third Vice-President*
J. D. GALLOWAY.....*Secretary-Treasurer*
Board of Directors—W. W. CAMPBELL, R. G. AITKEN, J. COSTA, A. L. BLACK, E. P. LEWIS, D. S. RICHARDSON, J. D. GALLOWAY, GEORGE E. HALE, BERNARD BENFIELD, W. H. CROCKER, C. S. CUSHING.
Publication Committee—R. G. AITKEN, J. H. MOORE, P. W. MERRILL.
Finance Committee—A. L. BLACK, W. H. CROCKER, J. COSTA.
Library Committee—B. BENFIELD, STURLA EINARSSON, J. D. GALLOWAY.
Comet-Medal Committee—W. W. CAMPBELL, STURLA EINARSSON, H. M. JEFFERS.

Article VIII of the By-Laws of the Society, as amended in 1903, reads as follows: "Each active member shall pay, as annual dues, the sum of five dollars, due on the first day of January each year in advance. When a new member is elected during the first quarter of any year, he shall pay full dues for such year; when elected during the second quarter, he shall pay three-fourths only of such dues; when elected during the third quarter, he shall pay one-half only of such dues; when elected during the last quarter, he shall pay one-fourth only of such dues; provided, however, that one-half only of the dues in this article provided for shall be collected from any member who is actually enrolled as a student at a university, seminary, high school, or other similar institution of learning, during such time as he is so enrolled. . . . Any member may be released from annual dues by the payment of fifty dollars at any one time, and placed on the roll of life members by the vote of the Board of Directors. . ."

Volumes for past years will be supplied to members, so far as the stock on hand is sufficient, on the payment of two dollars per volume to either of the Secretaries. Single copies will be supplied on the following basis: One dollar to non-members, seventy-five cents to dealers, and fifty cents to members.

The library of the Society is now located in the Sutro Branch of the California State Library, at the corner of Sacramento and Webster Streets, San Francisco, where the books may be consulted or taken out by members, subject to the regulations of the State Library.

The order in which papers are printed in the PUBLICATIONS is decided simply by convenience. In general, those papers are printed first which are earliest accepted for publication. Papers intended to be printed in a given number of the PUBLICATIONS should be in the hands of the Committee not later than the 20th of the month preceding the month of publication. The responsibility for the views expressed in the papers printed, and for the form of their expression, rests with the writers, and is not assumed by the Society. Articles for the PUBLICATIONS should be sent to the chairman of the Committee on Publication, R. G. Aitken, Lick Observatory, Mount Hamilton, California.

Reprints of articles appearing in the PUBLICATIONS will be furnished at cost prices.

Regular meetings of the Society are held in San Francisco or vicinity on the last Saturdays of January, March, June, and November, and at the Lick Observatory on the last Saturday of August. Members who propose to attend a meeting at Mount Hamilton should communicate with the Secretary-Treasurer, in order that arrangements may be made for transportation.

PUBLICATIONS ISSUED BI-MONTHLY.
(February, April, June, August, October, December.)

Published by the Astronomical Society of the Pacific at 709 Postal Telegraph Building, 22 Battery Stret, Saen Francisco, California. Subscription price, $5..00 per year.

Address of the Secretary-Treasurer:
MR. J. D. GALLOWAY,
709 Postal Telegraph Bldg., 22 Battery Street,
San Francisco, California

CONTENTS

CUSHING, CHAS. S., Address of the Retiring President of the Society in Awarding the Bruce Medal to Sir F. W. Dyson 2
ELLERMAN, F., The Sun 11
VAN MAANEN, A., The Zeeman Effect on the Sun 24
CURTIS, H. D., Stellar Luminosities 33
LUNDMARK, K., The Parallaxes of Bright and Dark Diffuse Nebulæ 40
MCNEILL, M., Planetary Phenomena for March and April, 1922 . 50

Notes from Pacific Coast Observatories:

The Motion in Some A Double Stars, Seventh Note, by R. G. AITKEN . 52
Suspected Nova Near H I 53 Pegasi, by K. LUNDMARK 53
Note on Some Faint Early Type Stars with Large Proper Motions, by W. J. LUYTEN 54
Note on Hertzsprung's Eclipsing Variable in Præsepe, by W. J. LUYTEN . 55
The Relation of Color Index to Spectrum in the Pleiades, by F. H. SEARS 56
Discovery of Bright Hydrogen Lines in the Spectrum of the Variable Star W Cephei, by M. L. HUMASON 58
Note on Invisible Sun-spots, by G. E. HALE 59
Summary of Mount Wilson Magnetic Observations of Sun-spots for November and December, 1921 61
Sun-spot Activity During 1921, by S. B. NICHOLSON 67

General Notes 68
Minutes of the Annual Meeting of the Society 71
Report of the Comet Medal Committee 72
Ninety-seventh Award of the Donohoe Comet Medal 72
Ninety-eighth Award of the Donohoe Comet Medal 72
Report of the Secretary-Treasurer for the Year Ending Jan. 28, 1922 73
Minutes of the Meetings of the Board of Directors 75
Officers of the Society 77